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NOTICE OF ALLOWANCE AND FEE(S) DUE

26211 7590 06/03/2008

FISH & RICHARDSON P.C. P.O. BOX 1022

MINNEAPOLIS, MN 55440-1022

EXAMINER FLANIGAN, ALLEN J

ART UNIT PAPER NUMBER

3744 DATE MAILED: 06/03/2008

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|-------------|----------------------|-----------------------|------------------|--|
| 10/540,804 | 06/27/2005 | Ralf Blomgren | 09546-024US1/55685 US | 7170 | |
| TITLE OF INVENTION: PLATE PACK, A PLATE HEAT EXCHANGER, AND A PLATE MODULE | | | | | |

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1440 | \$300 | \$0 | \$1740 | 09/03/2008 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE BEE and DIRLICATION BEE (if required). Blocks 1 through 5 should be completed where

| appropriate. All further indicated unless corrects maintenance fee notifica | correspondence including | of transmitting the 1330 ig the Patent, advance or ierwise in Block 1, by (a | rders and notification of r a) specifying a new corres | naintenance fees wil spondence address; a | If be mailed to the current and/or (b) indicating a sep | correspondence address as arate "FEE ADDRESS" for |
|--|--|---|---|--|---|--|
| | ENCE ADDRESS (Note: Use Bi | ock 1 for any change of address) | Note Feet pags have | e: A certificate of m s) Transmittal. This ers. Each additional p tits own certificate of | ailing can only be used for certificate cannot be used to paper, such as an assignment of mailing or transmission. | or domestic mailings of the for any other accompanying ent or formal drawing, must |
| 26211 | 7590 06/03 | /2008 | | Certif | ficate of Mailing or Trans | mission |
| FISH & RICH. P.O. BOX 1022 MINNEAPOLIS | ARDSON P.C. 5, MN 55440-1022 | | I he Stat addi tran | reby certify that this es Postal Service wit ressed to the Mail S smitted to the USPTO | Fee(s) Transmittal is bein th sufficient postage for fir Stop ISSUE FEE address O (57I) 273-2885, on the o | g deposited with the United st class mail in an envelope above, or being facsimile late indicated below. |
| | | | | | | (Depositor's name) |
| | | | | | | (Signature) |
| | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | 1 | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/540,804 | 06/27/2005 | | Ralf Blomgren | O. | 9546-024US1/55685 US | 7170 |
| | | | R, AND A PLATE MODU | | | |
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| nonprovisional | NO | \$1440 | \$300 | \$0 | \$1740 | 09/03/2008 |
| EXAM | IINER | ART UNIT | CLASS-SUBCLASS | J | | |
| FLANIGAN 1. Change of corresponde | | 3744 | 165-167000 | | | |
| "Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A | ND RESIDENCE DATA | 'Indication form ed. Use of a Customer A TO BE PRINTED ON T | (I) the names of up to or agents OR, alternative (2) the name of a single registered autorney or a 2 registered patent atto- listed, no name will be ITHE PATENT (print or typedate will appears on the pa- | vely, e firm (having as a n ugent) and the names rneys or agents. If no printed. | nember a 2 of up to o name is 3 | locument has been filed for |
| (A) NAME OF ASSI | GNEE | | (B) RESIDENCE: (CITY | and STATE OR CO | OUNTRY) | ocument has been filed for our pentity Government |
| Advance Order - | No small entity discount p | permitted) | A check is enclosed. Payment by credit car | d. Form PTO-2038 i | previously paid issue fee is attached. e the required fee(s), any de (enclose a | |
| - 11 | s SMALL ENTITY statu | is. See 37 CFR 1.27. | | | ENTITY status. See 37 C | |
| NOTE: The Issue Fee an interest as shown by the | d Publication Fee (if requeecords of the United Sta | ired) will not be accepted tes Patent and Trademark | d from anyone other than t Office. | he applicant; a regist | ered attorney or agent; or t | he assignee or other party in |
| Authorized Signature | | | | Date | | |
| Typed or printed name | | | | Registration No | | |
| This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223 | nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but (irginia 22313-1450. DC k13-1450. | FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to the ONOT SEND FEES OR (| on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO | etain a benefit by the imated to take 12 mi idual case. Any com er, U.S. Patent and Ti D THIS ADDRESS. | e public which is to file (an inutes to complete, including ments on the amount of ti rademark Office, U.S. Dep SEND TO: Commissioner | d by the USPTO to process) ag gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450, |

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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| FISH & RICHARDSON P.C. | | | FLANIGAN, ALLEN J | |
| P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022 | | | ART UNIT | PAPER NUMBER |
| | | | 3744 | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 646 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 646 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) |
|-------------------|----------------|
| 10/540,804 | BLOMGREN, RALF |
| Examiner | Art Unit |
| Allen J. Flanigan | 3744 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to patent application filed 6/27/2005.
- The allowed claim(s) is/are 26-50.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - b) ☐ Some* c) ☐ None of the: a) 🔯 All
 - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3. X Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. ☐ Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- Other .

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The claims are allowed because nothing in the art shows or suggests a plate module (or assembly of modules per claim 26) having the structure claimed including the portholes surrounded by a ring groove delimited by inner and outer lateral limitations that respectively form discontinuous and continuous surfaces (prior art modules of this type tend to show inner and outer delimiting surfaces of ring grooves that are both continuous or both discontinuous; nothing suggests the particular arrangement claimed).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen J. Flanigan whose telephone number is (571) 272-4910. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/540,804 Page 3

Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Allen J. Flanigan/ Primary Examiner, Art Unit 3744